

**In The Claims:**

1. (Currently Amended) A compensation circuit for a sensor generating an electrical sensor output positioned near a speaker of an audio system, said electrical sensor output altered by acoustics of the speaker comprising;

an inverting circuit electrically coupled to ~~[[the]]~~ an electrical output of the audio system, said inverting circuit generating an inverted electrical signal corresponding to a speaker audio output; and

a sensor controller coupled to the inverting circuit and said sensor, said controller generating a compensated electrical output signal in response to said electrical sensor output and said inverted electrical signal, said compensated electrical output signal corrected for an alteration by the acoustics of the speaker.

2. (Original) A compensation circuit as recited in claim 1 wherein said inverting circuit comprises an operational amplifier.

3. (Original) A compensation circuit as recited in claim 1 wherein said sensor comprises a pressure sensor.

4. (Original) A compensation circuit as recited in claim 1 wherein said speaker comprises a subwoofer.

5. (Original) A compensation circuit as recited in claim 1 wherein said inverting circuit comprises a delay circuit generating a time delay in said inverted electrical signal.

6. (Currently Amended) A compensation circuit as recited in claim 1 wherein said sensor controller adds the ~~compensated electrical output~~ inverted electrical signal and said electrical sensor output.

7. (Currently Amended) A compensation circuit as recited in ~~claim 6~~ claim 2 wherein said operational amplifier comprises a resistor coupled to an inverting input and an output.

8. (Currently Amended) A compensation circuit comprising:  
a sensor generating an electrical sensor output;  
a speaker of an audio system acoustically coupled to said sensor;  
an inverting circuit coupled to the electrical output of the speaker, said inverting circuit generating an inverted electrical signal corresponding to a speaker audio output altering the electrical sensor output; and  
a sensor controller coupled to the inverting circuit and said sensor, said controller generating a compensated electrical output signal in response to said electrical sensor output and said inverted electrical signal said compensated electrical output signal corrected for an alteration by the acoustics of the speaker.

9. (Original) A compensation circuit as recited in claim 8 wherein said sensor comprises a pressure sensor.

10. (Original) A compensation circuit as recited in claim 8 wherein said speaker comprises a subwoofer.

11. (Original) A compensation circuit as recited in claim 8 wherein said inverting circuit comprises a delay circuit generating a delay in said inverted electrical signal.

12. (Original) A compensation circuit as recited in claim 8 wherein said inverting circuit comprises an operational amplifier.

13. (Original) A compensation circuit as recited in claim 12 wherein said operational amplifier comprises a resistor coupled to an inverting input and an output.

14. (Original) A compensation circuit as recited in claim 8 wherein said sensor controller adds the inverted electrical output and said electrical sensor output.

15. (Original) A method for compensating for an electrical output of a sensor comprising:

generating an electrical signal at an audio system output and electrical input to a speaker;

inverting the electrical signal to form an inverted electrical signal;

generating an electrical sensor output signal altered by the acoustics of the speaker; and

combining the inverted electrical signal and sensor output signal to form a compensated electrical output.

16. (Original) A method as recited in claim 15 wherein the speaker comprises a subwoofer.

17. (Original) A method as recited in claim 15 further comprising generating a delay signal, wherein said inverted signal is formed in response to said delay signal.

18. (Original) A method as recited in claim 15 wherein combining comprises adding the inverted electrical output and said electrical sensor output.

19. (Original) A method as recited in claim 15 wherein the sensor comprises a pressure sensor.

20. (Original) A method as recited in claim 15 wherein generating an electrical signal comprises generating an electrical signal corresponding to the acoustic signal of the speaker.